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| K&L Gates LLP | | CHAWLA, JYOTI | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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chicago.patents@klgates.com

DETAILED ACTION

Applicant's submission filed on July 30, 2010 has been entered. Applicant has amended claims 3, 9 and cancelled claim 14. Claims 1, 3-4, 9-12 and 15-17 remain pending in the application.

Claim Objections

Objections to claims 9 and 14 made in the previous office action of 5/14/2010 have been withdrawn based on applicant's amendments of 7/30/2010.

Response to Arguments under PTOL-303, Item 11, Request for reconsideration

Applicant's arguments with respect to claims 1, 3-4, 9-12 and 15-17 filed 7/30/2010 have been fully considered but are not persuasive for the following reasons:

- i) Applicant argues against cited references by stating that "cited references, alone or in combination, fail to disclose or suggest each element of the rejected claims" (Remarks, page 4, last paragraph). Applicant's arrive at the above conclusion based on the statement that "references teach away from each other and are directed towards products having completely different objectives" (Remarks, page 5, lines 1-2 and page 5, last paragraph).

Applicants remarks regarding Petricca teaching a non-milk emulsion (Remarks, page 6, paragraph 2, lines 3-6) and applicants' other argument states that Petricca teaches essentially a non-dairy food product, which teaches away from Staackmann, and also teaches away from the present claims, which are directed to a milk product (Remarks, page 6, paragraphs 4 and 5) have been fully considered but have not been found persuasive. In response applicant is referred to Petricca Column 3, line 1 to Column 4, line 63, and also the rejection of claims 1 and 12 in the previous office action where it is disclosed that composition includes milk components and can also include milk.

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Regarding the limitation of milk product Petricca teaches that the whippable product may comprise sodium caseinate (see Column 1, lines 50-53 and Tables I and II), which is salt of casein, i.e., milk protein. Petricca further teaches that although preferred sweetener is sucrose, other nutritive sweeteners including lactose (i.e., milk sugar) can be used (Column 3, lines 17-24). Petricca also teaches of vegetable or animal sources of fat in the composition (Column 3, lines 3-4). Petricca also teaches of addition of milk to the composition prior to whipping (See Column 4, lines 61-63) i.e., Petricca discloses of a whippable milk product and does not teach against Staackmann or the claimed composition, as argued by the applicant.

ii) Applicant further argues that Petricca and Staackmann can not be combined based on the conclusion that “cited references are directed towards products having completely unrelated objectives”. This argument is also not persuasive and in response to applicant's argument that Petricca and Staackmann are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Petricca teaches a whippable product, which may comprise milk (for example, see Column 4, lines 61-63), i.e., a milk product. As discussed in response to argument i). The product of Petricca is “whippable homogenized emulsion comprising water fat sweetener, dispersible protein, thickener, buffer and emulsifier” (Column 1, lines 30-34). However, Petricca does not specifically teach that the monoglycerides are unsaturated monoglyceride in the amount of 0.005 to 0.15% by weight of the composition, as recited in the independent claim 1. Staackmann teaches of whippable topping, i.e., a foamable composition which falls in the same field of endeavor as Petricca and therefore Petricca and Staackmann both are directed towards similar objective of making a whippable or foamable food product as instantly claimed.

Further in response to applicant's argument that “references teach away from each other and are directed towards products having completely different objectives”

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(Remarks, page 5, lines 1-2 and page 5, last paragraph), applicant is referred to the rejection of claim 1 in the final office action of 5/14/2010 where the rejection clearly pointed out that Petricca teaches a whippable product, wherein the emulsifying composition having fatty acid moiety in polyglycerol ester can be “one or more even numbered C₁₂₋₂₂ saturated or unsaturated monocarboxylic acid” (see Column 3, lines 30-35) and that “mono and diglycerides may also be utilized in an attempt to reduce whipping time for the emulsion without affecting the stability” (Column 3, lines 63-66). Petricca discloses that emulsifying composition having fatty acid moiety in polyglycerol ester can be “one or more even numbered C₁₂₋₂₂ **saturated or unsaturated monocarboxylic acid**” (see Column 3, lines 30-35) (Emphasis added) and that “mono and diglycerides may also be utilized in an attempt to reduce whipping time for the emulsion without affecting the stability” (Column 3, lines 63-66). However, Petricca does not specifically teach that the monoglycerides are unsaturated monoglyceride in the amount of 0.005 to 0.15% by weight of the composition, as recited in the independent claim 1. Staackmann is being relied upon to show the conventionality of utilizing unsaturated monoglyceride in the range claimed by the applicant. Staackmann teaches of whippable topping, i.e., a foamable composition as discussed in response to argument ii) and the final office action of 5/14/2010. Regarding the selection of emulsifiers Staackmann discloses from the group consisting of propylene glycol monostearate (Column 3, lines 48-68), and fatty acid glycerides obtained from various fatty acids including unsaturated fatty acids, such as oleic, palmitoleic, myristoleic etc (See Staackmann Column 3, lines 3-12, 30-35 and 48-68) i.e., unsaturated monoglycerides and combinations thereof in the amount of 0.1% (Column 5, composition A), which overlaps the range 0.005% to 0.15% unsaturated monoglyceride as claimed. Thus, the two references Petricca and Staackmann both teach stable emulsions, which can be whipped, wherein the composition comprise monoglycerides are directed towards foamable or whippable products and do not teach against each other, as alleged by the applicant.

Since, Petricca and Staackmann both teach stable emulsions as claimed, it would be obvious that the emulsifiers used by the compositions would function similarly

by helping form a stable dispersion of the individual components in an emulsion, i.e., would be regarded as functional equivalents. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Petricca in view of Staackmann and substitute one art recognized functional equivalent (i.e., monoglyceride of a fatty acid) for another (i.e., monoglyceride of an unsaturated fatty acid) in the whippable product as disclosed by Petricca at least based on which emulsifying agents were more easily available and affordable at the time the invention was made. The Courts have held that the selection of a known material, which is based upon its suitability for the intended use, is within the ambit of one of ordinary skill in the art. See *In re Leshin*, 125 USPQ 416 (CCPA 1960) (see MPEP § 2144.07).

iii) In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning (Remarks, page 7, paragraph 4) it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Applicant's argument is not convincing as obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). As the references of record were published before the time the invention was made, the references of record would be knowledge generally available to one of ordinary skill in the art at the time the invention was made and thus the knowledge contained therein would be available to one of ordinary skill in the art. Furthermore, the fact that all the references used in the rejection have publication dates before the filing date of applicant's application indicates that the emulsifier combination as claimed was known

in the art and to modify the primary reference to include emulsifier combinations taught in secondary references to obtain the benefits taught would have been readily apparent to one skilled in the art. The rejection is not based on hindsight if the knowledge is obtained from the teaching of the prior art. Applicant has not presented any concrete reasoning or evidence to show why one skilled in the art would not have made the modification as set forth in the rejection.

iv) Applicant's other main argument against examiner's position of emulsifiers sorbitan monostearate and sorbitan tristearate being functional equivalents (Petricca in view of Igoe). Applicant argues that the two emulsifiers are not functional equivalents and applicant's base this argument on the differences in dispersibility of the two emulsifiers as discussed in Igoe (reference of record) in remarks on page 7, lines 7-20). Applicant's argument is not persuasive because Igoe clearly states that sorbitan tristearate also known as Polysorbate 65 and Span 65 is a non-ionic surfactant (emulsifier) which is dispersible in fat, oil and water and was known in the art of food at the time of the invention as disclosed by Dictionary of Food Ingredients, page 111. Sorbitan monostearate is also water dispersible. Regarding the specific use and amount of sorbitan tristearate, Igoe teaches that sorbitan tristearate is added to foods, such as, frozen desserts, cakes and coffee whiteners; frequently used with sorbitan monostearate or mono and diglycerides (other emulsifiers) typically in amounts 0.1 to 0.4%, which includes applicants' recited amount of 0.005 to 0.15% by weight.

Further regarding applicant's argument about the differences in dispersibility of sorbitan stearate emulsifiers, it is noted that both sorbitan monostearate and sorbitan tristearate are both water dispersible and are frequently used together or with other emulsifiers (Igoe page 111). Moreover the invention as claimed comprises more than one emulsifier and also comprises **fat in 0-40% by weight of the composition**, it would have been obvious that water dispersibility of an emulsifier is one of the desired features for the composition as the composition as claimed includes fat as an optional ingredient.

It is further noted that compounds sorbitan monostearate (Petricca) and sorbitan tristearate (Dictionary of Food Ingredients) are both fatty acid esters of sorbitan that are safe to use in foods and are both compounds have the following characteristics in common:

- both are sorbitan esters of stearic acid,
- both are water dispersible (Igoe and applicant's remarks page 7, lines 10-20),
- both are non-ionic surfactants or emulsifiers (Igoe),
- both are capable of being used in whipped or whippable food compositions (Petricca and Igoe),

recommended usage amount for both overlaps the claimed range of the applicant (Petricca and Igoe).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention that sorbitan monostearate (Petricca) and sorbitan tristearate (Dictionary of Food Ingredients) will function similarly (or emulsify) when added to a whippable composition, i.e., would be regarded as functional equivalents. Therefore, it would have been matter of routine determination for one of ordinary skill in the art at the time the invention was made to modify Petricca in view of Dictionary of Food Ingredients and substitute art recognized functional equivalent of a fatty acid ester of sorbitan (i.e., sorbitan monostearate) for another (i.e., sorbitan tristearate) in the whippable product as disclosed by Petricca at least based on which ester of sorbitan was more effective as an emulsifier, more affordable and more easily available at the time the invention was made. The Courts have held that the selection of a known material, which is based upon its suitability for the intended use, is within the ambit of one of ordinary skill in the art. See *In re Leshin*, 125 USPQ 416 (CCPA 1960) (see MPEP § 2144.07).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JYOTI CHAWLA whose telephone number is (571)272-8212. The examiner can normally be reached on 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JC/
Examiner
Art Unit 1794

/Keith D. Hendricks/
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